

3M General Offices
3M Center
St. Paul, Minnesota 55144-1000
612/733-1110
Duns No.: 00-617-3082

SAFETY HEALTH AND
ENVIRONMENTAL AFFAIRS

NOV 19 1992

ORIGINAL

01-83
2572

MATERIAL SAFETY
DATA SHEET

3M

DIVISION: ENGINEERING DOCUMENT SYSTEMS DIVISION

TRADE NAME:

3M BRAND TYPE 852 DEVELOPER PREMIX

3M I.D. NUMBER: GB-2000-4173-8 78-6969-5173-6

ISSUED: SEPTEMBER 2, 1992

SUPERSEDES: JULY 31, 1992

DOCUMENT: 10-3575-7

| 1. INGREDIENT | C.A.S. NO. | PERCENT |
|--|------------|--------------|
| IRON | 7439-89-6 | 60.0 - 100.0 |
| IRON OXIDE (MIXTURE WITH CAS #7439-89-6) | 1317-61-9 | 60.0 - 100.0 |
| POLYSTYRENE | 9003-53-6 | 5.0 - 10.0 |
| CARBON BLACK | 1333-86-4 | < 1.0 |
| C.I. SOLVENT BLACK 7 | 8005-02-5 | < 1.0 |
| C.I. SOLVENT BLUE 5 | 1325-86-6 | < 1.0 |
| FUMARATED ROSIN (MIXTURE WITH CAS #1325-86-6) | 65997-04-8 | < 1.0 |
| MONODODECYL ESTER OF SULFURIC ACID (MIXTURE WITH CAS #1325-86-6) | 151-41-7 | < 1.0 |

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... N/A
VAPOR DENSITY: N/A
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER: nil
SP. GRAVITY:..... ca. 7 Water = 1
PERCENT VOLATILE: N/A
VOLATILE ORGANICS: N/A
VOC LESS H2O & EXEMPT SOLVENT N/A
pH: N/A
VISCOSITY: N/A
MELTING POINT..... N/D
APPEARANCE AND ODOR: Granular, dark grey powder, essentially odorless.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... N/A
FLAMMABLE LIMITS - LEL: N/A
FLAMMABLE LIMITS - UEL: N/A
AUTOIGNITION TEMPERATURE: ... N/D
EXTINGUISHING MEDIA:
Water spray, Carbon dioxide, Dry chemical
SPECIAL FIRE FIGHTING PROCEDURES:
Not determined
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Dust clouds of this material in combination with an ignition source may be explosive.
NFPA-HAZARD-CODES: HEALTH 1 FIRE 1 REACTIVITY 0
UNUSUAL REACTION HAZARD: none

Abbreviations: N/D - Not Determined N/A - Not Applicable

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4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS TO AVOID:

Elevated temperature storage may cause clumping of powder.

HAZARDOUS POLYMERIZATION: Will Not Occur

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion products may include oxides of carbon and iron, hydrocarbons, carbon particulates, and styrene monomer.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Observe precautions from other sections. Vacuum to avoid dusting.
CAUTION! A vacuum cleaner could be an ignition source. Clean up residue with water. Place in a closed container.

Caution: Powder spill on a floor may create a slip hazard.

RECOMMENDED DISPOSAL:

Disposal in a sanitary landfill or industrial incinerator may be options. Since regulations and disposal options vary, consult applicable waste regulations or local waste disposal authorities prior to disposal.

ENVIRONMENTAL DATA:

No data available.

REGULATORY INFORMATION:

U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).
Since regulations vary, consult applicable regulations or authorities before disposal.

SARA HAZARD CLASS:

FIRE HAZARD: No **PRESSURE:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** No

6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

Wash affected area with soap and water.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Drink two glasses of water. Call a physician.

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7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact.

SKIN PROTECTION:

Avoid prolonged or repeated skin contact.

Not required. Wash with soap and water if powder contacts skin.

VENTILATION PROTECTION:

Use in a well-ventilated area.

This developer powder is used with 3M Quantimatic series printers. Adequate ventilation of the printer should be maintained during operation.

RESPIRATORY PROTECTION:

Avoid prolonged inhalation of dust..

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating.

Do not store or handle in areas where food or liquids are consumed.

RECOMMENDED STORAGE:

Store at room temperature. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep away from heat, sparks, open flame, and other sources of ignition.

Avoid generating airborne dusts of this or any other powder.

| INGREDIENTS | EXPOSURE LIMITS | | TYPE | AUTH | SKIN* |
|--|-----------------|-------|------|-------|-------|
| | VALUE | UNIT | | | |
| IRON | NONE | NONE | NONE | NONE | |
| IRON OXIDE (MIXTURE WITH CAS #7439-89-6) | NONE | NONE | NONE | NONE | |
| POLYSTYRENE | NONE | NONE | NONE | NONE | |
| CARBON BLACK | 3.5 | mg/m3 | TWA | ACGIH | |
| CARBON BLACK | 3.5 | mg/m3 | TWA | OSHA | |
| C.I. SOLVENT BLACK 7 | NONE | NONE | NONE | NONE | |
| C.I. SOLVENT BLUE 5 | NONE | NONE | NONE | NONE | |
| FUMARATED ROSIN (MIXTURE WITH CAS #1325-86-6) | NONE | NONE | NONE | NONE | |
| MONODODECYL ESTER OF SULFURIC ACID (MIXTURE WITH CAS #1325-86-6) | NONE | NONE | NONE | NONE | |

* SKIN NOTATION: Listed substances indicated with "Y" under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

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7. PRECAUTIONARY INFORMATION (CONTINUED)

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Mild Eye Irritation: signs/symptoms can include redness, swelling, pain, and tearing.

SKIN CONTACT:

Mild Skin Irritation: signs/symptoms can include redness, swelling, and itching.

INHALATION:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Pancreatic Disorders: signs/symptoms can include unusual thirst and weight changes.

Liver Effects: signs/symptoms can include yellow skin(jaundice) and tenderness of upper abdomen.

Fibrosis (general): signs/symptoms can include shortness of breath and persistent coughing.

IF SWALLOWED:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

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SECTION CHANGE DATES

| | | |
|--------------------------|------------------------------|----------------------------|
| FIRST AID | SECTION CHANGED SINCE | JULY 31, 1992 ISSUE |
| PRECAUT. INFO. | SECTION CHANGED SINCE | JULY 27, 1992 ISSUE |
| HEALTH HAZD. DATA | SECTION CHANGED SINCE | JULY 31, 1992 ISSUE |

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The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using the material in combination with any other material or any other process is the responsibility of the user.